

- * SWBAT differentiate between static and dynamic equilibrium
- * SWBAT apply the equilibrium rule.

Sep 6-2:31 PM

EQUILIBRIUM RULE! SUM OF FORCES = 0

SECA Physics
Monday 28 September 2015

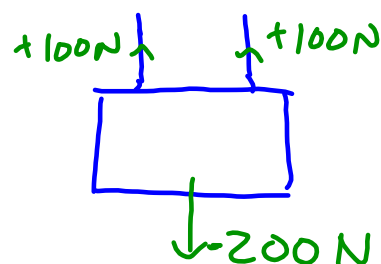
Welcome!!!

Centering...

* Pick up:

H. Leslie Grebe

- small slip of paper (for later)
- instruction sheet



Opening Activity:

Imagine that a framed picture of Liam (the English teacher) in an embarrassing position is hanging centered evenly by 2 hooks from the ceiling of the front hallway. **The picture weighs 200N.**

What is the upward force in each string?

Sep 7-7:04 AM

Apple on a Desk

Archie - air pressure

Sam - only gravity ~~||||~~ |

Soledad - desk pushes, gravity pulls |||

Misha - many, holding force |||

Tess - none, desk stops them ||

"NORMAL"

SUPPORT FORCE BALANCES
WEIGHT

Sep 28-8:15 AM

EQUILIBRIUM \Rightarrow BALANCED OR STEADY

Big Idea of the Day:

Kinds of Equilibrium???

You are in the car in the middle of nowhere on a long smooth straight open road. The cruise control is set at 65 mph.

Are you in **equilibrium**?

You have a book flat on your lap. Could you balance a deck of cards on end on the book while the car was moving?

Sep 21-2:13 PM

Dynamic Equilibrium

→ MOVING



Static Equilibrium

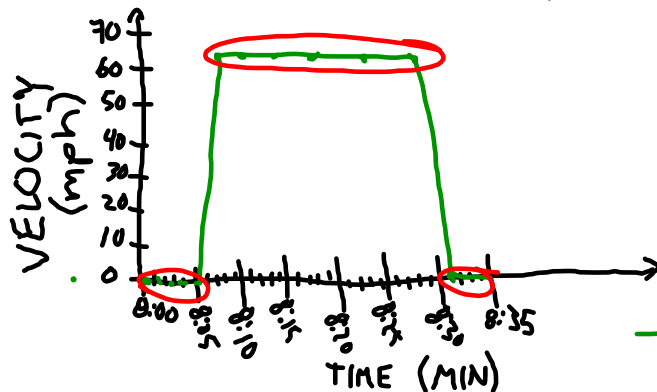
→ STILL

An object can have all of its forces balanced (positives and negatives add to zero) and be **MOVING!**

If:

- it's not speeding up / slowing down
- it's not turning

Car with cruise control at 65 mph



When could you keep the cards balanced?

ANY TIME THE
VELOCITY STAYS
THE SAME

— FLAT ON GRAPH

Sep 21-2:37 PM

Let's try it out on the computer!

OAS: NBT

Catchy Physics Phrases

Sep 16-2:23 PM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

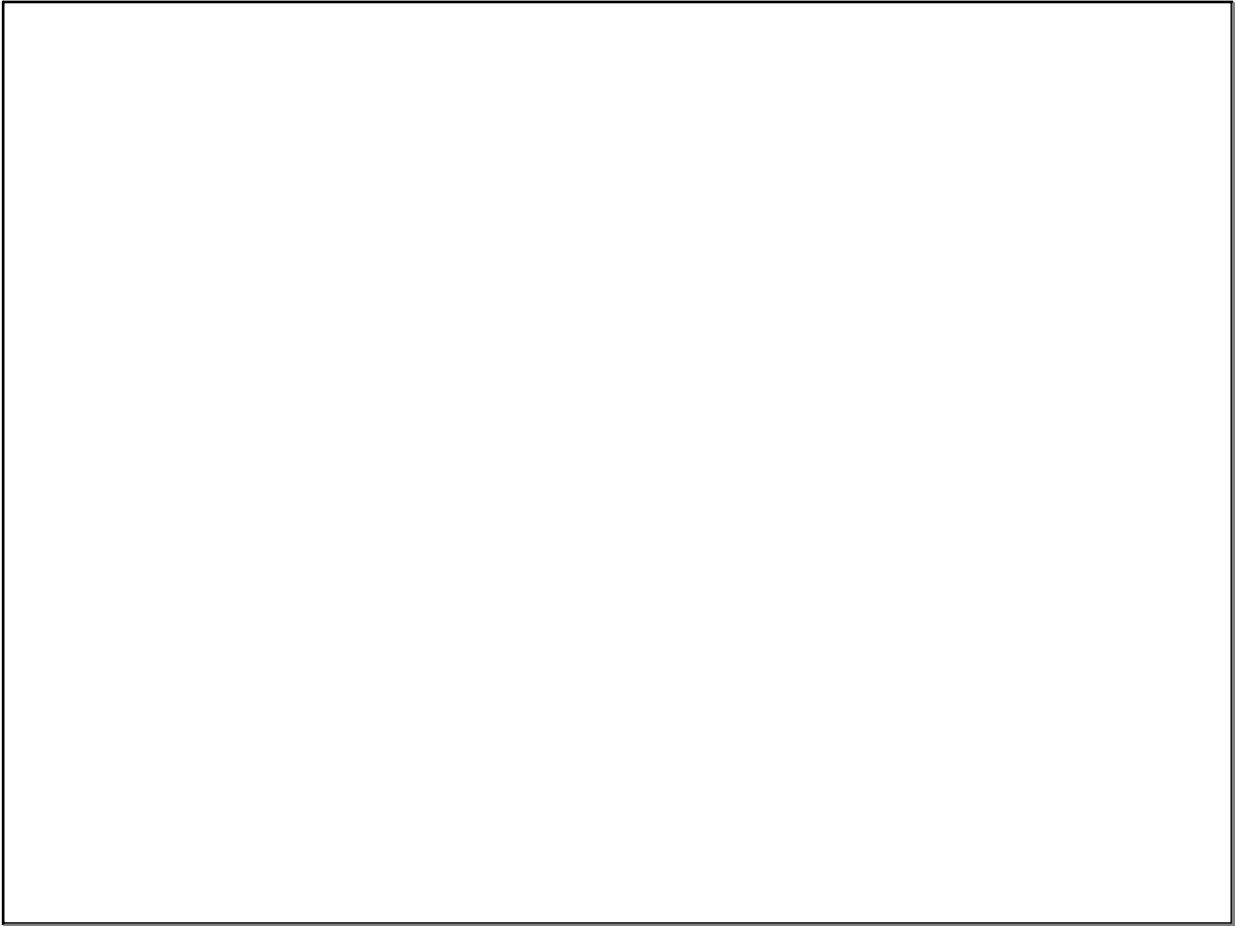
1. True or False: the author of the book would agree with Sam that gravity is the only force on the apple.

2. True or False: Something can be in equilibrium (positive and negative forces cancel out to zero) while it is moving.

3. Have you been checked off for your lab steps?

YES?

Sep 14-7:28 AM



Sep 18-7:51 AM